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NNN      NNN      CCCCCCCCCCCCCC  PPPPPPPPPPPPP
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NN      NN      CCCCCCCC  PPPPPPPP  SSSSSSSS  TTTTTTTTTT  AAAAAA  MM      MM  TTTTTTTTTT  RRRRRRRR
NN      NN      CCCCCCCC  PPPPPPPP  SSSSSSSS  TTTTTTTTTT  AAAAAA  MM      MM  TTTTTTTTTT  RRRRRRRR
NN      NN      CC        PP        PP  SS        TT        AA      AA  MMMM  MMMM  TT        RR      RR
NN      NN      CC        PP        PP  SS        TT        AA      AA  MMMM  MMMM  TT        RR      RR
NNNN    NN      CC        PP        PP  SS        TT        AA      AA  MM  MM  MM      TT        RR      RR
NNNN    NN      CC        PP        PP  SS        TT        AA      AA  MM  MM  MM      TT        RR      RR
NN      NN      CC        PPPPPPPP  SSSSSS    TT        AA      AA  MM      MM  TT        RRRRRRRR
NN      NN      CC        PPPPPPPP  SSSSSS    TT        AA      AA  MM      MM  TT        RRRRRRRR
NN      NN      CC        PP        SS        TT        AAAAAAAAAA  MM      MM  TT        RR      RR
NN      NN      CC        PP        SS        TT        AAAAAAAAAA  MM      MM  TT        RR      RR
NN      NN      CC        PP        SS        TT        AA      AA  MM      MM  TT        RR      RR
NN      NN      CC        PP        SS        TT        AA      AA  MM      MM  TT        RR      RR
NN      NN      CCCCCCCC  PP        SSSSSSSS  TT        AA      AA  MM      MM  TT        RR      RR
NN      NN      CCCCCCCC  PP        SSSSSSSS  TT        AA      AA  MM      MM  TT        RR      RR
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LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```

```
0001 0 XTITLE 'X.25 Trace Module Parsing'
0002 0 MODULE NCPSTAMTR (IDENT = 'V04-000',LIST(NOOBJECT)) =
0003 1 BEGIN
0004 1
0005 1
0006 1 *****
0007 1 *
0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0011 1 *
0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
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0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0025 1 *
0026 1 *****
0027 1
0028 1
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0030 1 ++
0031 1 FACILITY:      Network Control Program (NCP)
0032 1
0033 1 ABSTRACT:
0034 1
0035 1      States and data for the parsing of NCP X.25 Trace module parameters
0036 1
0037 1 ENVIRONMENT:  VAX/VMS Operating System
0038 1
0039 1 AUTHOR:      Bob Grosso July 1982
0040 1
0041 1 MODIFIED BY:
0042 1
0043 1      V03-005 RPG0005      Bob Grosso      04-Nov-1982
0044 1      Correct SET X-T K T STATE ON from parsing STA instead
0045 1      of TST.
0046 1
0047 1      V03-004 RPG0004      Bob Grosso      15-Sep-1982
0048 1      Flag presence of qualifier on command line so that
0049 1      the ALL check in NCPVRBACT will work properly.
0050 1      Make a noise word of X25-T in SET/CLEAR tracepoint.
0051 1
0052 1      V03-003 RPG0003      Bob Grosso      03-Sep-1982
0053 1      Fix parameter ranges in some prompt strings.
0054 1
0055 1      V03-002 TMH0002      Tim Halvorsen    16-Aug-1982
0056 1      Fix PCL table so that literal parameters such as STATE
0057 1      as coded as NUMB rather than LITB, since that is the
```



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0058 1 |
0059 1 |
0060 1 |
0061 1 |
0062 1 |
0063 1 |
0064 1 |
0065 1 |
0066 1 |
0067 1 |
0068 1 |
0069 1 |
0070 1 |
0071 1 |--

```

way byte values are put into the NICE message. (In a PCL list, LITB means store the parameter code, but no value - used in CLEAR/PURGE).
Fix so that TRACEPOINT STATE is distinguished from X25-TRACE STATE, and so that a different parameter code is sent for each.
Fix CLEAR TPT PBK to correctly indicate that it is a TKN rather than a LITB, so that the tracepoint name is sent correctly in the NICE message.

V03-001 RP60001 Bob Grosso 03-Aug-1982
 Enhance prompting for ALL

```
73 0072 1 %SBTTL 'Definitions'
74 0073 1
75 0074 1
76 0075 1 INCLUDE FILES:
77 0076 1
78 0077 1
79 0078 1 LIBRARY 'LIB$:NMALIBRY';
80 0079 1 LIBRARY 'LIB$:NCPLIBRY';
81 0080 1 LIBRARY 'SYS$LIBRARY:TPAMAC';
82 0081 1
83 0082 1
84 0083 1 EXTERNAL REFERENCES:
85 0084 1
86 0085 1
87 0086 1 ACT_DFN ! Action routine externals
88 0087 1
89 0088 1 EXTERNAL
90 0089 1 NCP$GL_QUALPRS; ! Flag presence of qualifier
91 0090 1
92 0091 1
93 0092 1 OWN storage
94 0093 1
95 0094 1
96 0095 1 OWN
97 0096 1 TPT_PARAMS; ! True if tracepoint parameters
98 0097 1 ! False if trace-wide parameters
99 0098 1
100 0099 1
101 0100 1 LITERALS
102 0101 1
103 0102 1
104 0103 1 LITERAL
105 0104 1 QUALPRESENT = 1; ! Flag presence of qualifier on command line
106 0105 1
```

```
108      0106 1 %SBTTL 'Set Parameter blocks'
109      0107 1
110      0108 1
111      0109 1
112      0110 1
113      0111 1
114      P 0112 1 BUILD_PCL
115      P 0113 1
116      P 0114 1 (MTR, ! Module X25-TRACE
117      P 0115 1
118      P 0116 1 TPT, TKN, PCXT_TPT, .
119      P 0117 1
120      P 0118 1 STA, NUMB, PCXT_STA, .
121      P 0119 1 BSZ, NUMW, PCXT_BSZ, .
122      P 0120 1 MBK, NUMW, PCXT_MBK, .
123      P 0121 1 FNM, TKN, PCXT_FNM, .
124      P 0122 1 MBF, NUMW, PCXT_MBF, .
125      P 0123 1 CPL, NUMW, PCXT_CPL, .
126      P 0124 1 MVR, NUMW, PCXT_MVR, .
127      P 0125 1
128      P 0126 1 CPS, NUMW, PCXT_CPS, .
129      P 0127 1 TST, NUMB, PCXT_TST, .
130      P 0128 1
131      P 0129 1 , END, . .
132      P 0130 1 )
133      0131 1
134      0132 1
135      P 0133 1 BUILD_PBK
136      P 0134 1
137      P 0135 1 (MTR, ! Module X25-TRACE
138      P 0136 1
139      P 0137 1 STAON, LITB, NMASC_STATE_ON, MTR_STA,
140      P 0138 1 STAOFF, LITB, NMASC_STATE_OFF, MTR_STA,
141      P 0139 1 BSZ, NUMW, . .
142      P 0140 1 MBK, NUMW, . .
143      P 0141 1 FNM, TKN, . .
144      P 0142 1 MBF, NUMW, . .
145      P 0143 1 CPL, NUMW, . .
146      P 0144 1 MVR, NUMW, . .
147      P 0145 1 TPT, TKN,
148      P 0146 1 KTP, LITB, NMASC_ENT_KNO, MTR_TPT, ! Known tracepoints
149      P 0147 1 CPS, NUMW,
150      P 0148 1 TSTON, LITB, NMASC_STATE_ON, MTR_TST,
151      P 0149 1 TSTOFF, LITB, NMASC_STATE_OFF, MTR_TST,
152      P 0150 1
153      0151 1 )
154      0152 1
155      0153 1 BIND PDB$G_MTR_ENT = UPLIT BYTE(0, %ASCIC 'X25-TRACE');
156      0154 1
157      P 0155 1 BUILD_SDB
158      0156 1 (MTR, NMASC_ENT_MOD, MTR_ENT, MTR)
```



```
160      0157 1 XSBTTL 'Clear Parameter blocks'
161      0158 1
162      0159 1
163      0160 1
164      0161 1
165      0162 1
166      P 0163 1 BUILD_PCL
167      P 0164 1
168      P 0165 1 (CTR, ! Module X25-TRACE
169      P 0166 1
170      P 0167 1 TPT, TKN, PCXT_TPT, .
171      P 0168 1
172      P 0169 1 STA, LITB, PCXT_STA, .
173      P 0170 1 BSZ, LITB, PCXT_BSZ, .
174      P 0171 1 MBK, LITB, PCXT_MBK, .
175      P 0172 1 FNM, LITB, PCXT_FNM, .
176      P 0173 1 MBF, LITB, PCXT_MBF, .
177      P 0174 1 CPL, LITB, PCXT_CPL, .
178      P 0175 1 MVR, LITB, PCXT_MVR, .
179      P 0176 1
180      P 0177 1 CPS, LITB, PCXT_CPS, .
181      P 0178 1 TST, LITB, PCXT_TST, .
182      P 0179 1
183      P 0180 1 , END, . . .
184      P 0181 1
185      0182 1 )
186      0183 1
187      P 0184 1 BUILD_PBK
188      P 0185 1
189      P 0186 1 (CTR, ! Module X25-TRACE
190      P 0187 1
191      P 0188 1 ALL, LITB, 0, VRB_ALL,
192      P 0189 1
193      P 0190 1 STA, LITB, 0, .
194      P 0191 1 BSZ, LITB, 0, .
195      P 0192 1 MBK, LITB, 0, .
196      P 0193 1 FNM, LITB, 0, .
197      P 0194 1 MBF, LITB, 0, .
198      P 0195 1 CPL, LITB, 0, .
199      P 0196 1 MVR, LITB, 0, .
200      P 0197 1 TPT, TKN, 0, .
201      P 0198 1 KTP, LITB, NMASC_ENT_KNO, CTR_TPT, ! Known tracepoints
202      P 0199 1 CPS, LITB, 0, .
203      P 0200 1 TST, LITB, 0, .
204      P 0201 1
205      0202 1 )
206      0203 1
207      P 0204 1 BUILD_SDB
208      P 0205 1
209      0206 1 (CTR, NMASC_ENT_MOD, MTR_ENT, CTR)
```

```
211 0207 1 %SBTTL 'Prompt strings'
212 0208 1
213 0209 1
214 0210 1 Build prompt strings
215 0211 1
216 0212 1
217 0213 1 BIND
218 0214 1
219 P 0215 1 PROMPT_STRINGS
220 P 0216 1 (MTR,
221 P 0217 1
222 P 0218 1 DAT, ' (TRACEPOINT name, or KNOWN): ',
223 P 0219 1 KWN, ' (TRACEPOINTS): ',
224 P 0220 1
225 P 0221 1 STA, 'State (ON or OFF): ',
226 P 0222 1 BSZ, 'Buffer size (1-4096 bytes): ',
227 P 0223 1 MBK, 'Maximum blocks (1-65535): ',
228 P 0224 1 FNM, 'Filename (1-253 characters): ',
229 P 0225 1 MBF, 'Maximum number of buffers (1-255): ',
230 P 0226 1 CPL, 'Global data capture limit (1-65535): ',
231 P 0227 1 MVR, 'Maximum trace file version (1-255): ',
232 P 0228 1 TPT, 'Trace point name (tracepointname.channel): ',
233 P 0229 1 CPS, 'Per-trace capture size (1-65535 bytes): ',
234 P 0230 1 TST, 'Per-trace state (ON or OFF): ',
235 0231 1 ),
236 0232 1
237 P 0233 1 PROMPT_STRINGS
238 P 0234 1 (CTR,
239 P 0235 1
240 P 0236 1 DAT, ' (TRACEPOINT name, or KNOWN): ',
241 P 0237 1 KWN, ' (TRACEPOINTS): ',
242 P 0238 1 ALL, 'All X.25 Trace parameters (Y, N): ',
243 P 0239 1 ALL2, 'All X.25 Trace tracepoint parameters (Y, N): ',
244 P 0240 1
245 P 0241 1 STA, 'State (Y, N): ',
246 P 0242 1 BSZ, 'Buffer size (Y, N): ',
247 P 0243 1 MBK, 'Maximum blocks (Y, N): ',
248 P 0244 1 FNM, 'Filename (Y, N): ',
249 P 0245 1 MBF, 'Maximum number of buffers (Y, N): ',
250 P 0246 1 CPL, 'Global data capture limit (Y, N): ',
251 P 0247 1 MVR, 'Maximum trace file version (Y, N): ',
252 P 0248 1 TPT, 'Trace point name (Y, N): ',
253 P 0249 1 CPS, 'Per-trace capture size (Y, N): ',
254 P 0250 1 TST, 'Per-trace state (Y, N): ',
255 P 0251 1
256 0252 1 );
```



```
.. 258 0253 1 %SBTTL 'Declare entry points to TPARSE tables'
.. 259 0254 1
.. 260 0255 1
.. 261 0256 1      |
.. 262 0257 1      |      Declare entry points to this TPARSE table
.. 263 0258 1      |
.. 264 0259 1 $INIT_STATE (NCP$G_STTBL_MTR, NCP$G_KYTBL_MTR);
.. 265 0260 1
.. 266 0261 1 FORWARD
.. 267 0262 1      ST_MTRTPT:      VECTOR [0],      | Set X25-TRACE Tracepoint
.. 268 0263 1      ST_CTRTPT:      VECTOR [0],      | Clear X25-TRACE Tracepoint
.. 269 0264 1      ST_CTR:          VECTOR [0];      | Clear X25-TRACE
.. 270 0265 1
.. 271 0266 1 GLOBAL BIND
.. 272 0267 1      NCP$G_STTBL_MTRTPT = ST_MTRTPT,
.. 273 0268 1      NCP$G_KYTBL_MTRTPT = NCP$G_KYTBL_MTR,
.. 274 0269 1      NCP$G_STTBL_CTR = ST_CTR,
.. 275 0270 1      NCP$G_KYTBL_CTR = NCP$G_KYTBL_MTR,
.. 276 0271 1      NCP$G_STTBL_CTRTPT = ST_CTRTPT,
.. 277 0272 1      NCP$G_KYTBL_CTRTPT = NCP$G_KYTBL_MTR;
```

```

279      0273 1 %SBTTL 'SET X25-TRACE Module Parameters'
280      0274 1
281      0275 1
282      0276 1 SET/DEFINE MODULE X25-TRACE parameter states
283      0277 1
284      0278 1
285      P 0279 1 $STATE (ST_MTR,
286      P 0280 1 ((ST_MTR_INIT))
287      0281 1 );
288      P 0282 1 $STATE (
289      P 0283 1 (TPAS_EOS, ST_MTR_PMT_DAT),
290      P 0284 1 (TPAS_LAMBDA, ST_MTR_DAT)
291      0285 1 );
292      0286 1
293      0287 1
294      0288 1 SET TRACEPOINT dispatched from NCPSTAVRB
295      0289 1
296      P 0290 1 $STATE (ST_MTRTPT,
297      P 0291 1 ((ST_MTR_INIT), ST_MTR_DAT_TPT)
298      0292 1 );
299      0293 1
300      P 0294 1 $STATE (ST_MTR_INIT,
301      0295 1 (TPAS_LAMBDA, TPAS_EXIT, ACT$CLRLONG,,, TPT_PARAMS)); ! Assume trace-wide params
302      0296 1
303      0297 1
304      0298 1 Determine which X25 Trace sub-database we are talking about
305      0299 1 (due to grouping restrictions, the command must not mix
306      0300 1 sub-database parameters). The sub-database may be either
307      0301 1 X25-Trace or tracepoint parameters.
308      0302 1
309      0303 1
310      P 0304 1 $STATE (ST_MTR_PMT_DAT,
311      0305 1 (TPAS_LAMBDA,, ACT$PRMPT,,, PMT$G_MTR_DAT));
312      0306 1
313      P 0307 1 $STATE (ST_MTR_DAT, ! Determine whether TRACEPOINT parameters
314      P 0308 1 ('TRACEPOINT', ST_MTR_DAT_TPT),
315      P 0309 1 ('KNOWN', ST_MTR_DAT_KWN),
316      P 0310 1 (TPAS_LAMBDA) ! Else assume TRACE-wide parameters
317      0311 1 );
318      0312 1
319      0313 1
320      0314 1 Prompt for normal Trace parameters
321      0315 1
322      P 0316 1 $STATE (
323      P 0317 1 (TPAS_EOS), ! Start prompting if EOS
324      0318 1 (TPAS_LAMBDA, ST_MTR_PRC)); ! Else try parsing parameters
325      0319 1
326      P 0320 1 PROMPT_STATES
327      P 0321 1 (MTR,
328      P 0322 1
329      0323 1 STA, BSZ, MBK, FNM, MBF, CPL, MVR)
330      0324 1
331      P 0325 1 $STATE (
332      0326 1 (TPAS_LAMBDA, ST_MTR_DOIT));
333      0327 1
334      0328 1
335      0329 1 Prompt for tracepoint parameters

```

```
336 0330 1 !
337 0331 1
338 P 0332 1 $STATE (ST_MTR_DAT_TPT,
339 0333 1 ((SE_TRCPNT_NAME),, ACT$SAVPRM,QUALPRESENT, NCP$GL_QUALPRS, PBK$G_MTR_TPT));
340 0334 1
341 P 0335 1 $STATE (ST_MTR_PMT_TPT,
342 P 0336 1 (TPAS_EOS), ! Start prompting if EOS
343 P 0337 1 (TPAS_LAMBDA, ST_MTR_PRC, ! Else try parsing parameters while
344 0338 1 TRUE, TPT_PARAMS)); ! remembering that we are parsing
345 0339 1 ! tracepoint-specific parameters
346 0340 1
347 P 0341 1 PROMPT_STATES
348 P 0342 1 (MTR,
349 P 0343 1
350 0344 1 CPS, TST)
351 0345 1
352 P 0346 1 $STATE (ST_MTR_DOIT,
353 P 0347 1 (TPAS_EOS, TPAS_EXIT, ACT$VRB_UTILITY, , , SDB$G_MTR),
354 0348 1 );
355 0349 1
356 0350 1 !
357 0351 1 ! Dispatch on KNOWN keyword during prompting
358 0352 1 !
359 0353 1
360 P 0354 1 $STATE (ST_MTR_DAT_KWN,
361 0355 1 (TPAS_LAMBDA));
362 0356 1
363 P 0357 1 COMMAND PROMPT
364 P 0358 1 (MTR, KWN, NCP$_INVKEY,
365 P 0359 1
366 P 0360 1 ('TRACEPOINTS', ST_MTR_PMT_TPT, ACT$SAVPRM,,, PBK$G_MTR_KTP),
367 0361 1 )
```



```
369 0362 1
370 0363 1
371 0364 1
372 0365 1
373 0366 1
374 0367 1
375 P 0368 1 $STATE (ST_MTR_PRC,
376 P 0369 1 (TPAS_LAMBDA, ST_TPT_PRC, ACT$TESTLONG,,, TPT_PARAMS),
377 0370 1 (TPAS_LAMBDA));
378 0371 1
379 0372 1
380 0373 1
381 0374 1
382 0375 1
383 P 0376 1 $STATE (
384 P 0377 1 ((SE_ALL), ST_MTR_DOIT),
385 P 0378 1
386 P 0379 1 DISPATCH_STATES
387 P 0380 1 (MTR,
388 P 0381 1
389 P 0382 1 BSZ, 'BUFFER',
390 P 0383 1 CAP, 'CAPTURE',
391 P 0384 1 FNM, 'FILE',
392 P 0385 1 MAX, 'MAXIMUM',
393 P 0386 1 STA, 'STATE',
394 P 0387 1
395 P 0388 1 )
396 P 0389 1
397 P 0390 1 (TPAS_EOS, ST_MTR_DOIT)
398 0391 1 );
399 0392 1
400 0393 1
401 0394 1
402 0395 1
403 0396 1
404 P 0397 1 $STATE (ST_TPT_PRC,
405 P 0398 1
406 P 0399 1 ((SE_ALL), ST_MTR_DOIT),
407 P 0400 1
408 P 0401 1 DISPATCH_STATES
409 P 0402 1 (MTR,
410 P 0403 1
411 P 0404 1 CAP, 'CAPTURE',
412 P 0405 1 TST, 'STATE',
413 P 0406 1
414 P 0407 1 )
415 P 0408 1
416 P 0409 1 (TPAS_EOS, ST_MTR_DOIT)
417 0410 1 );
```

```
419      0411 1
420      0412 1
421      0413 1
422      0414 1
423      0415 1
424      P 0416 1 $STATE (ST_MTR_PRC_KWN,
425      0417 1 ((SE_MTR_KWN), ST_MTR_PRC));
426      0418 1
427      P 0419 1 $STATE (SE_MTR_KWN,
428      P 0420 1
429      P 0421 1 KEYWORD_STATE
430      P 0422 1 (MTR,
431      P 0423 1
432      P 0424 1 KTP, 'TRACEPOINTS',
433      P 0425 1
434      0426 1 ));
435      0427 1
436      0428 1
437      0429 1
438      0430 1
439      0431 1
440      P 0432 1 $STATE (ST_MTR_PRC_MAX,
441      P 0433 1
442      P 0434 1 DISPATCH_STATES
443      P 0435 1 (MTR,
444      P 0436 1
445      P 0437 1 MBK, 'BLOCKS',
446      P 0438 1 MBF, 'BUFFERS',
447      P 0439 1 MVR, 'VERSIONS',
448      P 0440 1
449      0441 1 ));
450      0442 1
451      0443 1
452      0444 1
453      0445 1
454      0446 1
455      P 0447 1 $STATE (ST_MTR_PRC_CAP,
456      P 0448 1
457      P 0449 1 DISPATCH_STATES
458      P 0450 1 (MTR,
459      P 0451 1
460      P 0452 1 CPL, 'LIMIT',
461      P 0453 1 CPS, 'SIZE',
462      P 0454 1
463      0455 1 ));
464      0456 1
465      0457 1
466      0458 1
467      0459 1
468      0460 1
469      P 0461 1 $STATE (ST_MTR_STA,
470      P 0462 1
471      P 0463 1 KEYWORD_STATE
472      P 0464 1 (MTR,
473      P 0465 1
474      P 0466 1 STAON, 'ON',
475      P 0467 1 STAOFF, 'OFF',
```

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V04-000

X.25 Trace Module Parsing
SET X25-TRACE Module Parameters

E 16
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```

: 476      P 0468 1
: 477      0469 1      ));
: 478      0470 1
: 479      0471 1      |
: 480      0472 1      Tracing state
: 481      0473 1      |
: 482      0474 1
: 483      P 0475 1      $STATE (ST_MTR_TST,
: 484      P 0476 1
: 485      P 0477 1      KEYWORD_STATE
: 486      P 0478 1      (MTR,
: 487      P 0479 1
: 488      P 0480 1      TSTON, 'ON'
: 489      P 0481 1      TSTOFF, 'OFF',
: 490      P 0482 1
: 491      0483 1      ));
```


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X.25 Trace Module Parsing
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```

: 493      0484 1
: 494      0485 1
: 495      0486 1
: 496      0487 1
: 497      0488 1
: 498      P 0489 1
: 499      P 0490 1
: 500      P 0491 1
: 501      P 0492 1
: 502      P 0493 1
: 503      P 0494 1
: 504      P 0495 1
: 505      P 0496 1
: 506      P 0497 1
: 507      P 0498 1
: 508      P 0499 1
: 509      P 0500 1
: 510      P 0501 1
: 511      0502 1

```

Process states

PROCESS_STATES
(MTR,
BSZ, 'SIZE',
CPL, 'LIMIT',
CPS, 'SIZE',
FNM,
MBK, 'BLOCKS',
MBF, 'BUFFERS',
MVR, 'VERSIONS',
STA, ,
TST, ,
)

513	0503	1	
514	0504	1	
515	0505	1	
516	0506	1	
517	0507	1	
518	0508	1	
519	0509	1	
520	0510	1	
521	0511	1	
522	0512	1	
523	0513	1	
524	0514	1	
525	0515	1	
526	0516	1	
527	0517	1	
528	0518	1	
529	0519	1	

Subexpression states

SUB EXPRESSIONS
(MTR,

BSZ, TPAS_DECIMAL,
CPL, TPAS_DECIMAL,
CPS, TPAS_DECIMAL,
FNM, (SE FILE_ID),
MBK, TPAS_DECIMAL,
MBF, TPAS_DECIMAL,
MVR, TPAS_DECIMAL,
)

```
531 0520 1 %SBTTL 'CLEAR X25-TRACE Module Parameters'
532 0521 1
533 0522 1
534 0523 1 CLEAR/PURGE MODULE X25-TRACE parameter states
535 0524 1
536 0525 1
537 P 0526 1 $STATE (ST_CTR,
538 P 0527 1 ((ST_CTR_INIT))
539 0528 1 );
540 P 0529 1 $STATE (
541 P 0530 1 (TPAS_EOS, ST_CTR_PMT_DAT),
542 P 0531 1 (TPAS_LAMBDA, ST_CTR_DAT)
543 0532 1 );
544 0533 1
545 0534 1
546 0535 1 CLEAR TRACEPOINT dispatched from NCPSTAVRB
547 0536 1
548 P 0537 1 $STATE (ST_CTRTPT,
549 P 0538 1 ((ST_CTR_INIT), ST_CTR_DAT_TPT)
550 0539 1 );
551 0540 1
552 0541 1
553 P 0542 1 $STATE (ST_CTR_INIT,
554 0543 1 (TPAS_LAMBDA, TPAS_EXIT, ACT$CLRLONG,,, TPT_PARAMS)); ! Assume trace-wide params
555 0544 1
556 0545 1
557 0546 1 Determine which X25 TRACE sub-database we are talking about
558 0547 1 (due to grouping restrictions, the command must not mix
559 0548 1 sub-database parameters). The sub-database may be either
560 0549 1 X25 TRACE or tracepoint parameters.
561 0550 1
562 0551 1
563 P 0552 1 $STATE (ST_CTR_PMT_DAT,
564 0553 1 (TPAS_LAMBDA,, ACT$PRMPT,,, PMT$G_CTR_DAT));
565 0554 1
566 P 0555 1 $STATE (ST_CTR_DAT, ! Determine whether TRACEPOINT parameters
567 P 0556 1 ('TRACEPOINT', ST_CTR_DAT_TPT),
568 P 0557 1 ('KNOWN', ST_CTR_DAT_KWN),
569 0558 1 (TPAS_LAMBDA)); ! Else, assume TRACE-wide
570 0559 1
571 0560 1
572 0561 1 Prompt for normal trace parameters
573 0562 1
574 0563 1
575 P 0564 1 $STATE (
576 P 0565 1 (TPAS_EOS), ! Start prompting if EOS
577 0566 1 (TPAS_LAMBDA, ST_CTR_PRC)); ! Else, try parsing parameters
578 0567 1
579 P 0568 1 QUERY_STATES
580 P 0569 1 (CTR,
581 P 0570 1
582 0571 1 ALL, STA, BSZ, MBK, FNM, MBF, CPL, MVR)
583 0572 1
584 P 0573 1 $STATE (
585 0574 1 (TPAS_LAMBDA, ST_CTR_DOIT));
586 0575 1
587 0576 1 !
```



```
: 588      0577 1 | Prompt for tracepoint parameters
: 589      0578 1 |
: 590      0579 1 |
: 591      P 0580 1 $STATE (ST_CTR_DAT_TPT,
: 592      0581 1 (TPAS_LAMBDA,,, TRUE, TPT_PARAMS)); ! Remember that we are parsing
: 593      0582 1 ! tracepoint-specific parameters
: 594      P 0583 1 $STATE (
: 595      0584 1 ({SE_TRCPNT_NAME),, ACT$SAVPRM,,, PBK$G_CTR_TPT));
: 596      0585 1
: 597      P 0586 1 $STATE (ST_CTR_PMT_TPT,
: 598      0587 1 (TPAS_EOS), ! Start prompting if EOS
: 599      0588 1 (TPAS_LAMBDA,ST_CTR_PRC)); ! Else, try parsing parameters
: 600      0589 1
: 601      P 0590 1 QUERY_STATES_S
: 602      P 0591 1 (CTR,
: 603      P 0592 1
: 604      0593 1 ALL, ALL2, CPS, CPS, TST, TST)
: 605      0594 1
: 606      P 0595 1 $STATE (ST_CTR_DOIT,
: 607      P 0596 1 (TPAS_EOS, TPAS_EXIT, ACT$VRB_UTILITY, . . SDB$G_CTR),
: 608      0597 1 );
: 609      0598 1
: 610      0599 1 |
: 611      0600 1 | Dispatch on KNOWN keyword during prompting
: 612      0601 1 |
: 613      0602 1 |
: 614      P 0603 1 $STATE (ST_CTR_DAT_KWN,
: 615      0604 1 (TPAS_LAMBDA));
: 616      0605 1
: 617      P 0606 1 COMMAND_PROMPT
: 618      P 0607 1 (CTR, KWN, NCPS_INVKEY,
: 619      P 0608 1
: 620      P 0609 1 ('TRACEPOINTS', ST_CTR_PMT_TPT, ACT$SAVPRM,,, PBK$G_CTR_KTP),
: 621      0610 1 )
```

```
623 0611 1
624 0612 1
625 0613 1
626 0614 1
627 0615 1
628 0616 1
629 P 0617 1 $STATE (ST_CTR_PRC,
630 P 0618 1 (TPAS_LAMBDA, ST_CTP_PRC, ACT$TESTLONG,,, TPT_PARAMS),
631 0619 1 (TPAS_LAMBDA));
632 0620 1
633 0621 1
634 0622 1
635 0623 1
636 0624 1
637 0625 1
638 P 0626 1 $STATE (,
639 P 0627 1
640 P 0628 1 DISPATCH_STATES
641 P 0629 1 (CTR,
642 P 0630 1
643 P 0631 1 ALL, 'ALL',
644 P 0632 1 BSZ, 'BUFFER',
645 P 0633 1 CAP, 'CAPTURE',
646 P 0634 1 FNM, 'FILE',
647 P 0635 1 MAX, 'MAXIMUM',
648 P 0636 1 STA, 'STATE',
649 P 0637 1 )
650 P 0638 1
651 P 0639 1 (TPAS_EOS, ST_CTR_DOIT)
652 0640 1 );
653 0641 1
654 0642 1
655 0643 1
656 0644 1
657 0645 1
658 P 0646 1 $STATE (ST_CTP_PRC,
659 P 0647 1
660 P 0648 1 DISPATCH_STATES
661 P 0649 1 (CTR,
662 P 0650 1
663 P 0651 1 ALL, 'ALL',
664 P 0652 1 CAP, 'CAPTURE',
665 P 0653 1 TST, 'STATE',
666 P 0654 1 )
667 P 0655 1
668 P 0656 1 (TPAS_EOS, ST_CTR_DOIT)
669 0657 1 );
```

```
671 0658 1
672 0659 1
673 0660 1      Dispatch on KNOWN keyword
674 0661 1
675 0662 1
676 P 0663 1 $STATE (ST_CTR_PRC_KWN,
677 0664 1 ((SE_CTR_KWN), ST_CTR_PRC));
678 0665 1
679 P 0666 1 $STATE (SE_CTR_KWN,
680 P 0667 1
681 P 0668 1 KEYWORD_STATE
682 P 0669 1 (CTR,
683 P 0670 1
684 P 0671 1 KTP, 'TRACEPOINTS',
685 P 0672 1
686 0673 1 ));
687 0674 1
688 0675 1
689 0676 1      Dispatch on MAXIMUM keyword
690 0677 1
691 0678 1
692 P 0679 1 $STATE (ST_CTR_PRC_MAX,
693 P 0680 1
694 P 0681 1 DISPATCH_STATES
695 P 0682 1 (CTR,
696 P 0683 1
697 P 0684 1 MBK, 'BLOCKS',
698 P 0685 1 MBF, 'BUFFERS',
699 P 0686 1 MVR, 'VERSIONS',
700 P 0687 1
701 0688 1 ));
702 0689 1
703 0690 1
704 0691 1      Dispatch on CAPTURE keyword
705 0692 1
706 0693 1
707 P 0694 1 $STATE (ST_CTR_PRC_CAP,
708 P 0695 1
709 P 0696 1 DISPATCH_STATES
710 P 0697 1 (CTR,
711 P 0698 1
712 P 0699 1 CPL, 'LIMIT',
713 P 0700 1 CPS, 'SIZE',
714 P 0701 1
715 0702 1 ));
```



```

717      0703 1
718      0704 1
719      0705 1
720      0706 1
721      0707 1
722      P 0708 1
723      P 0709 1
724      P 0710 1
725      P 0711 1
726      P 0712 1
727      P 0713 1
728      P 0714 1
729      P 0715 1
730      P 0716 1
731      P 0717 1
732      P 0718 1
733      P 0719 1
734      P 0720 1
735      P 0721 1
736      P 0722 1
737      0723 1

```

Process states

PROCESS_STATES
(CTR,

ALL, ,

BSZ, 'SIZE',
CPL, 'LIMIT',
CPS, 'SIZE',
FNM,
MBK, 'BLOCKS',
MBF, 'BUFFERS',
MVR, 'VERSIONS',
STA, ,
TST, ,
)

739	0724	1	
740	0725	1	
741	0726	1	
742	0727	1	
743	0728	1	
744	0729	1	
745	0730	1	
746	0731	1	
747	0732	1	
748	0733	1	
749	0734	1	
750	0735	1	
751	0736	1	
752	0737	1	
753	0738	1	
754	0739	1	
755	0740	1	
756	0741	1	
757	0742	1	
758	0743	1	
759	0744	1	

Subexpression states

SUB EXPRESSIONS
(CTR,

ALL, TPAS_EOS,

BSZ, TPAS_LAMBDA,
CPL, TPAS_LAMBDA,
CPS, TPAS_LAMBDA,
FNM, TPAS_LAMBDA,
MBK, TPAS_LAMBDA,
MBF, TPAS_LAMBDA,
MVR, TPAS_LAMBDA,
STA, TPAS_LAMBDA,
TST, TPAS_LAMBDA,
)

```

: 761      0745 1 %SBTTL 'Define Subexpressions'
: 762      0746 1
: 763      0747 1 !
: 764      0748 1 !
: 765      0749 1 !
: 766      0750 1
: 767      0751 1
: 768      0752 1
: 769      0753 1
: 770      0754 1
: 771      0755 1

Define Subexpressions from Library

SEM_ALL           ! All parameter
SEM_FILE_ID       ! File name
SEM_LINE_ID       ! For tracepoint name
SEM_QUERY         ! Query state subexpressions
SEM_TRCPNT_NAME   ! Tracepoint name

```

NCPSTAMTR
V04-000

X.25 Trace Module Parsing
Define Subexpressions

: 773
: 774

0756 1 END
0757 0 ELUDOM

C 1
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